

PATENT ABSTRACTS OF JAPAN

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(71)Applicant : NARIS COSMETICS CO LTD

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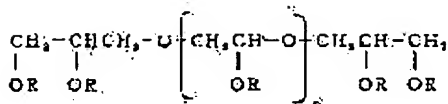
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(54) OILY SOLID COSMETIC

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain an oily solid cosmetic capable of suppressing a sweating phenomenon of exudation to the surface without deteriorating basic usability such as slip, smoothness, gloss, a moist feeling or finish during coating.

SOLUTION: This oily solid cosmetic is characterized by formulating a polyglycerol ester of a fatty acid represented by the following formula as an active ingredient suppressing the sweating caused on the surface of the cosmetic and the fatty acids in the polyglycerol ester of the fatty acid are composed of, e.g. a mixture of one or more kinds of main constituent fatty acids that are =14C saturated fatty acids and contain =60 wt.% of behenic acid. The average degree of polymerization of glycerol is 7-11 and the degree of esterification of the polyglycerol ester is =80%.



LEGAL STATUS

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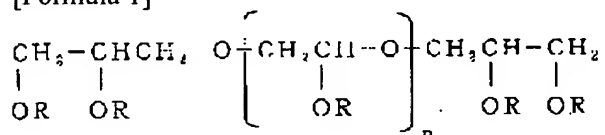
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CLAIMS

[Claim(s)]

[Claim 1] Oily solid cosmetics characterized by blending as an active principle which is shown by ** 1, and which controls sweating which generates polyglyceryl fatty acid ester on the surface of cosmetics.

[Formula 1]



[Claim 2] For the configuration of the fatty acid in polyglyceryl fatty acid ester, 7-11, and the rate of esterification are the oily solid cosmetics according to claim 1 to which the main configuration fatty acid is with a carbon numbers of 14 or more saturated fatty acid, and it is one sort or two sorts or more of mixture of them, and is characterized by containing behenic acid 60% of the weight or more, and glycerol average degree of polymerization is characterized by being 80% or more.

[Claim 3] Oily solid cosmetics according to claim 1 to 2 whose loadings of polyglyceryl fatty acid ester are 0.01 to 10 amount [in the oily solid cosmetics whole quantity] %.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to oily solid cosmetics and the oily solid cosmetics which improved controlling sweating generated on the surface of cosmetics, without containing polyglyceryl fatty acid ester in a system in more detail, and spoiling fundamental usability.

[0002]

[Description of the Prior Art] Generally, in oily solid cosmetics, such as a lip stick, foundation, and eye shadow, fine particles, such as a wax, liquefied oil, and a coloring agent, perfume, etc. are blended, and the combination of these components is performing preparation of the mileage at the time of spreading, smoothness and luster, fundamental usability, such as admiration and a result, and stability gently. The phenomenon called the so-called sweating in which a liquid especially water drop-like on the front face of oily solid cosmetics in stability oozes is raised as a description of oily solid cosmetics. However, in oily solid cosmetics, in order to raise the mileage at the time of spreading, and smoothness and the fundamental usability of a result, the loadings of a wax were lessened as much as possible, but when lessened too much, sweating was not produced on the surface of cosmetics, and the region with which it should fully be satisfied of stabilization of usability and sweating was not

necessarily arrived at.

[0003] Then, in order to raise the depressor effect of sweating of oily solid cosmetics, there are an example which has blended the amorphous micro crystallin wax, and an example which blended polyoxyethylene yellow bees wax further. However, in order to fully improve the depressor effect of sweating by these approaches and to have to blend many these components into a system, the mileage at the time of spreading and fundamental usability, such as smoothness and a result, are spoiled, and it has not resulted in the solution in question.

[0004]

[Problem(s) to be Solved by the Invention] Therefore, the purpose of this invention does not spoil fundamental usability, but is to offer oily solid cosmetics without a sweating phenomenon which was described above.

[Means for Solving the Problem]

[0005] this invention persons came to complete a header and this invention for an improvement effect being in control of the sweating phenomenon generated on the front face of oily solid cosmetics in polyglyceryl fatty acid ester, as a result of repeating research to upgrading of the oily solid cosmetics which are the above-mentioned troubles wholeheartedly.

[0006] That is, this invention relates to the oily solid cosmetics characterized by blending as an active principle which controls sweating which generates polyglyceryl fatty acid ester on the surface of cosmetics.

[0007] The main configuration fatty acid is with a carbon numbers of 14 or more saturated fatty acid, and the configuration fatty acids of the polyglyceryl fatty acid ester blended with the oily solid cosmetics of this invention are one sort or two sorts or more of mixture of them, and contain behenic acid 60% of the weight or more. As with a carbon numbers of 14 or more saturated fatty acid, a myristic acid, a palmitic acid, stearin acid, arachin acid, behenic acid, a lignoceric acid, a cerotic acid, etc. are mentioned. In order to raise the depressor effect of sweating, it is containing behenic acid 65% of the weight or more preferably among the main configuration fatty acids, and containing behenic acid 80% of the weight still more preferably. Moreover, if behenic acid becomes less than 60% of the weight, the depressor effect of sweating becomes inadequate, the purpose of this invention is not attained, and it is not desirable.

[0008] Its 80 % of the weight or more is desirable, and when the rate of esterification of the fatty acid to the polyglycerin of the polyglyceryl fatty acid ester blended with the oily solid cosmetics of this invention becomes 90% of the weight or more, it is still more desirable. Moreover, if the rate of esterification becomes less than 80%, it stops affecting the depressor effect of sweating, the purpose of this invention is not attained, and it is not desirable.

[0009] As for the glycerol polymerization degree of the polyglyceryl fatty acid ester blended with the oily solid cosmetics of this invention, 7-11 are desirable, and 8-10 are more desirable. Moreover, if glycerol polymerization degree becomes less than seven, the purpose of this invention is not attained and it is not desirable.

[0010] Furthermore, the polyglyceryl fatty acid ester blended with the oily solid cosmetics of this invention can control surface sweating by blending 0.01 to 10% of the weight into the oily solid cosmetics whole quantity. As loadings to the inside of the cosmetics whole quantity, it is 0.05 - 5 % of the weight preferably, and is 0.1 - 3 % of the weight still more preferably. The depressor effect of sweating of loadings at less than 0.01 % of the weight is inadequate, and if it blends 10% of the weight or more, since fundamental usability, such as mileage at the time of spreading and smoothness, will worsen, it is not desirable.

[0011] At least one sort of the wax and wax-like matter or two sorts or more are characterized by liquefied and containing at least one sort of a cosmetics pigment, or two sorts or more for at least one sort of half-solid oil, or two sorts or more 0.5 to 30% of the weight 20 to 90% of the weight three to 30% of the weight as an indispensable component at the oily solid cosmetics of this invention.

[0012] As a thing of the wax and wax-like matter used for this invention here, although a ceresin wax, a micro crystallin wax, a candelilla wax, a carnauba wax, a polyethylene RENE wax, paraffin wax, a rice wax, yellow bees wax, haze wax, etc. are mentioned, it is not necessarily limited only to these, for example.

[0013] As a thing of liquefied and half-solid oil, for example Moreover, a liquid paraffin, Hydrocarbons, such as flow isoparaffin and squalane; Olive oil, a macadamia-nuts oil, Natural vegetable oil, such as castor oil, an avocado oil, and a meadowfoam oil; Dimethylpolysiloxane, Silicon oil, such as a methylphenyl polysiloxane and annular silicone; Malate diisostearyl, The Tori octanoic-acid glyceryl, Tori isostearic acid trimethylol propane, Ester, such as myristic-acid octyldodecyl, dimer acid diisopropyl, and iso nonoic acid iso tridecyl; although higher alcohol, such as an octyl dodecanol, isostearyl alcohol, and stearyl alcohol, etc. is mentioned, it is not necessarily limited only to these.

[0014] Moreover, as a cosmetics pigment, the well-known pigment usually used for cosmetics can be used. For example, extenders, such as a sericite, a mica, talc, a silica, a kaolin, nylon powder, and synthetic phlogopite; coloring agents, such as titanium oxide, an iron oxide, ultramarine blue, organic tar system coloring matter, and a lake, etc. are mentioned.

Moreover, although what processed these cosmetics pigments with silicone, fatty acid ester, metallic soap, etc. can be used, it is not necessarily limited only to these.

[0015] Unless the depressor effect of sweating in polyglyceryl fatty acid ester is spoiled according to the purpose besides the above-mentioned component, oily raw materials other than the above, a surfactant, antiseptics, an antioxidant, a macromolecule, a moisturizer, water, an ultraviolet ray absorbent, resin, a solvent, perfume, etc. can be blended with the oily solid cosmetics of this invention if needed.

[0016] Moreover, although the oily solid cosmetics of this invention can be manufactured if heating, the dissolution, stirring, mixing, etc. carry out the above-mentioned component according to a conventional method, and they set makeup cosmetics, such as a lip stick, foundation, and eye shadow, as the main purpose, they are widely applicable to the whole cosmetics field in the limitation which does not spoil the sweating depressor effect of polyglyceryl fatty acid ester according to the purpose.

[0017]

[Example] Hereafter, this invention is not limited by these although an example explains this invention to a detail further. In addition, as long as there is no assignment, weight % shows especially loadings.

[0018] About the presentation of the example shown in Table 1, and the example of a comparison, the dished lip stick was manufactured, the existence of sweating generated on a front face about the cast was checked, and organic-functions evaluation was further performed in accordance with the following valuation basis.

[0019]

[Table 1]

【表1】

成分	実施例1	実施例2	比較例1	比較例2	比較例3	比較例4	比較例5	比較例6	比較例7
(1) セレンワックス	6	3	6	6	8	6	6	3	3
(2) キャンデリラワックス	5	10	5	5	5	5	5	10	10
(3) カルナバロウ	2	—	2	2	2	2	2	—	—
(4) マイクロクリスタリンワックス	—	4	0.2	—	8	—	—	4	1
(5) ポリオキシエチレンミツロウ(8E. O.)	—	—	—	0.2	—	—	—	0.1	—
(6) ポリグリセリン脂肪酸エステル *—1	0.2	0.1	—	—	—	12	—	—	—
(7) ポリグリセリン脂肪酸エステル *—2	—	—	—	—	—	—	0.2	—	—
(8) ヒマシ油	20	20	20	20	20	20	20	20	20
(9) リンゴ酸ジイソステアリル	40	40	40	40	40	40	40	40	40
(10) 流動パラフィン	16.7	12.8	16.7	16.7	8.9	6.9	16.7	12.8	12.9
(11) 赤色202号	3	3	3	3	3	3	3	3	3
(12) 黄色4号アルミニウムレーキ	2	2	2	2	2	2	2	2	2
(13) 雲母チタン	5	5	5	5	5	5	5	5	5
(14) 酸化防止剤	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
表面の発汗の有無	3日後	○	○	△	○	○	△	○	○
	30日後	○	○	×	×	○	×	△	×
官能評価	塗布時のひび	6.2	5.2	5.8	5.9	4.1	6.2	5.0	5.2
	塗布後のつや	5.9	4.8	5.6	5.6	3.9	5.8	4.5	4.9
	塗布後のしつとり感	5.8	4.6	5.5	5.4	4.0	5.8	4.5	4.7
	仕上がり	6.0	5.3	5.5	5.7	4.1	6.1	5.2	5.3

* 1 構成脂肪酸のうち、ペヘン酸80重量%以上含有し、グリセリン重合度は10、エステル化率90%以上からなるポリグリセリン脂肪酸エステル
 *—2 構成脂肪酸のうち、イソステアリン酸を65重量%含有(ペヘン酸は含有しない)、グリセリン重合度は3、エステル化率90%以上からなるポリグリセリン脂肪酸エステル

[0020] (Process) A. component (1) Even - (10) is supplied to a heating dissolution iron pot, and the heating dissolution is carried out at 90-100 degrees C. B. Add component (11) - (13) to A, and fully perform distributed processing in a roll mill. C. Carry out the heating dissolution of the B again, and deaerate after adjusting to 85-90 degrees C. D. Add a

component (14) to C, slush into a dished container and cast.

[0021] The symptom of sweating stability is first left in the 30-degree C thermostat which prepared the dished lip stick cast to 83.6% of relative humidity with the potassium chloride saturated water solution. Next, it supplies to 37-degree-C thermostat of 40% of relative humidity the three-day back of neglect, and 30 days after, respectively. And the lip stick front face 2 hours after an injection was observed visually, and existence of sweating was checked.

[0022] (Existence of sweating) The valuation basis of the existence of sweating measured sweating on the front face of a lip stick visually, and evaluated by measuring the diameter of the oil droplet of sweating after a check on a scale. Sweating arose, and the diameter of "O" and an oil droplet made 1.0mm or more "x", and it made less than 1.0mm "***" for ****.

[0023] Ten special panelists performed organic-functions evaluation, and it evaluated as evaluation of a fundamental feeling of use about four items of "the mileage at the time of spreading", "the luster after spreading", "it being admiration after spreading gently", and "a result."

[0024] As criteria of organic-functions evaluation, the average mark of each result is shown in Table 1 about each evaluation criteria using the seven-step evaluation which makes 1 and the place which sets right ** to 7 very much, and corresponds most check **** very much.

[0025] In the formula of this invention, effectiveness is in control of sweating generated on a front face, and, moreover, it is clearly checked that they are the mileage at the time of spreading, the luster after spreading, and a thing without the thing after spreading for which fundamental usability, such as admiration, is spoiled gently so that clearly from the result of Table 1.

[0026] Furthermore, this invention persons performed DSC measurement 30 days after [the three day back of neglect, and] about the example 1, the example 1 of a comparison, and the example 2 of a comparison. About the measuring method of DSC, it carried out by the following approach.

[0027] (DSC measurement)

測定機器 セイコー電子工業社製 DSC 220C

測定条件 昇温速度: 5℃/min

試料量: 10.0mg

温度範囲: -50~120℃

[0028] Although the big peak at 63.1 degrees C is observed [61.8 degrees C and the example 2 of a comparison] in the example 1 of a comparison by the DSC result of 30 days after so that clearly from the result of drawing 1 - drawing 6, only very few peaks are observed by 60.2 degrees C in the example 1. From these things, compared with the example 1 of a comparison, and the example 2 of a comparison, change of a crystal with time also has few examples 1, and being stabilized is suggested. Therefore, it is checked clearly that the depressor effect of sweating is making the oily solid cosmetics of this invention improve also from a DSC result.

[0029] Drawing 1 [0030] Drawing 2 [0031] Drawing 3 [0032] Drawing 4 [0033] Drawing 5

[0034] Drawing 6 [0035]

[Effect of the Invention] As explained above, this invention offers the oily solid cosmetics which blended the polyglyceryl fatty acid ester which improves the depressor effect of sweating, without spoiling fundamental usability.

[0036]

[Brief Description of the Drawings]

[Drawing 1] It is the spectrum Fig. which performed DCS measurement for ** and the oily solid cosmetics of an example 1 after neglect for three days.

[Drawing 2] It is the spectrum Fig. which performed DCS measurement for ** and the oily solid cosmetics of an example 1 after neglect for 30 days.

[Drawing 3] It is the spectrum Fig. which performed DCS measurement for the oily solid cosmetics of ** and the example 1 of a comparison after neglect for three days.

[Drawing 4] It is the spectrum Fig. which performed DCS measurement for the oily solid cosmetics of ** and the example 1 of a comparison after neglect for 30 days.

[Drawing 5] It is the spectrum Fig. which performed DCS measurement for the oily solid cosmetics of ** and the example 2 of a comparison after neglect for three days.

[Drawing 6] It is the spectrum Fig. which performed DCS measurement for the oily solid cosmetics of ** and the example 2 of a comparison after neglect for 30 days.

MEANS

[Means for Solving the Problem]

[0005] this invention persons came to complete a header and this invention for an improvement effect being in control of the sweating phenomenon generated on the front face of oily solid cosmetics in polyglyceryl fatty acid ester, as a result of repeating research to upgrading of the oily solid cosmetics which are the above-mentioned troubles wholeheartedly.

[0006] That is, this invention relates to the oily solid cosmetics characterized by blending as an active principle which controls sweating which generates polyglyceryl fatty acid ester on the surface of cosmetics.

[0007] The main configuration fatty acid is with a carbon numbers of 14 or more saturated fatty acid, and the configuration fatty acids of the polyglyceryl fatty acid ester blended with the oily solid cosmetics of this invention are one sort or two sorts or more of mixture of them, and contain behenic acid 60% of the weight or more. As with a carbon numbers of 14 or more saturated fatty acid, a myristic acid, a palmitic acid, stearin acid, arachin acid, behenic acid, a lignoceric acid, a cerotic acid, etc. are mentioned. In order to raise the depressor effect of sweating, it is containing behenic acid 65% of the weight or more preferably among the main configuration fatty acids, and containing behenic acid 80% of the weight still more preferably. Moreover, if behenic acid becomes less than 60% of the weight, the depressor effect of sweating becomes inadequate, the purpose of this invention is not attained, and it is not desirable.

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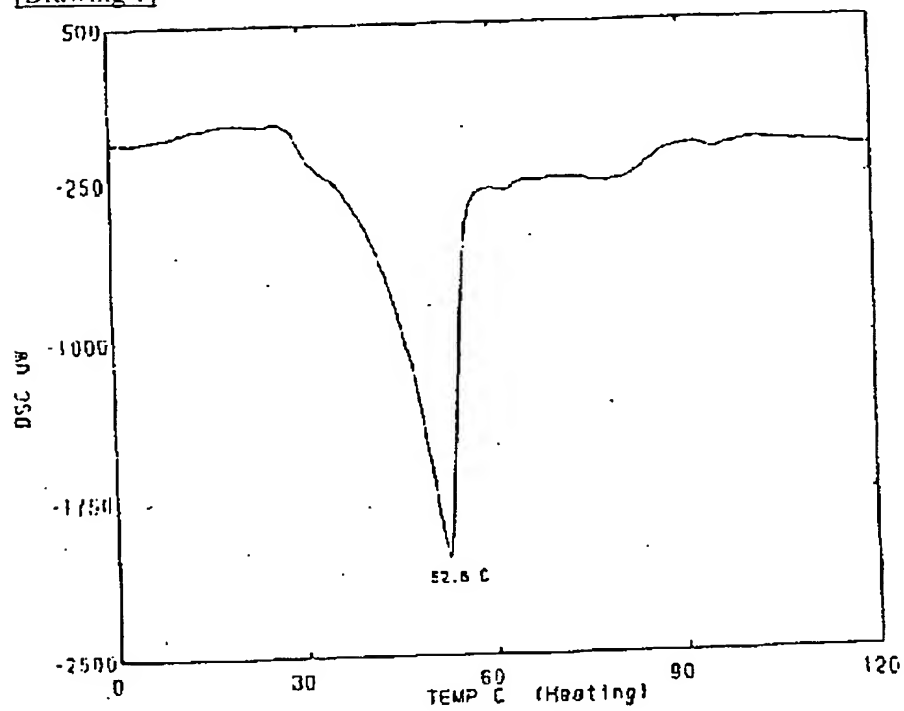
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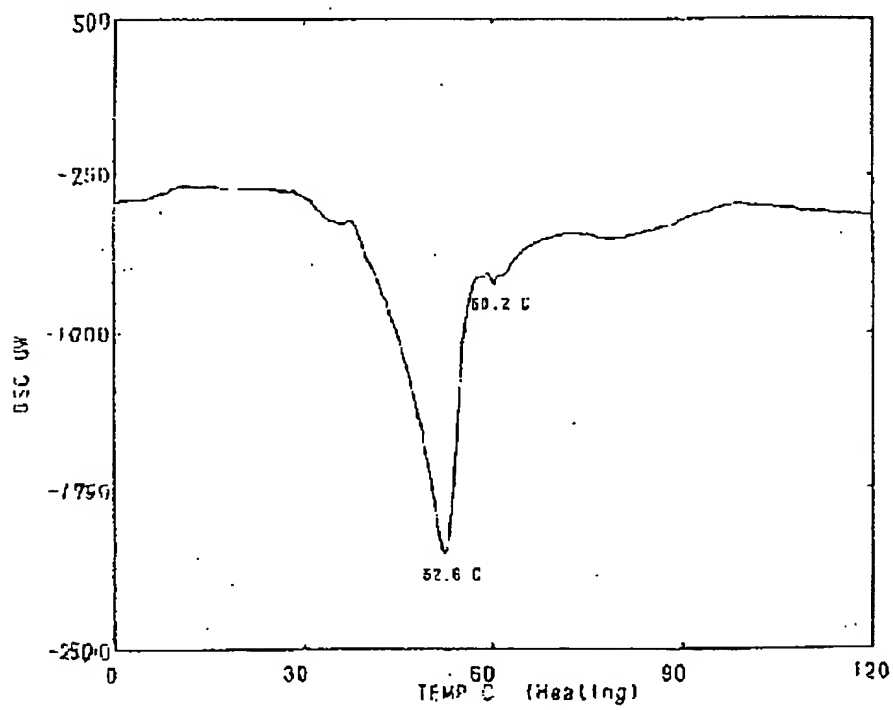
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DRAWINGS

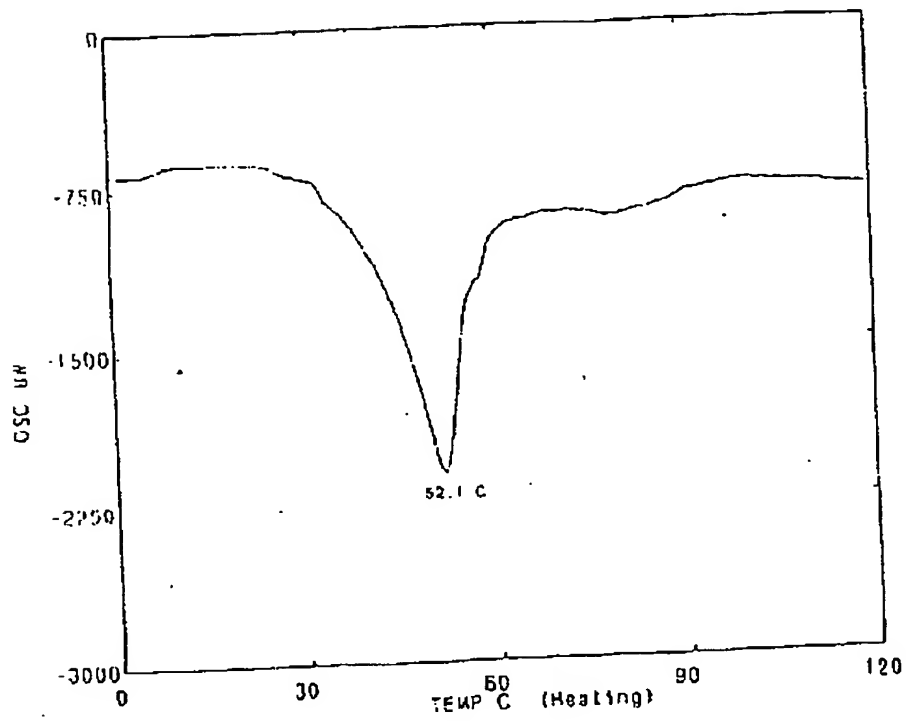
[Drawing 1]



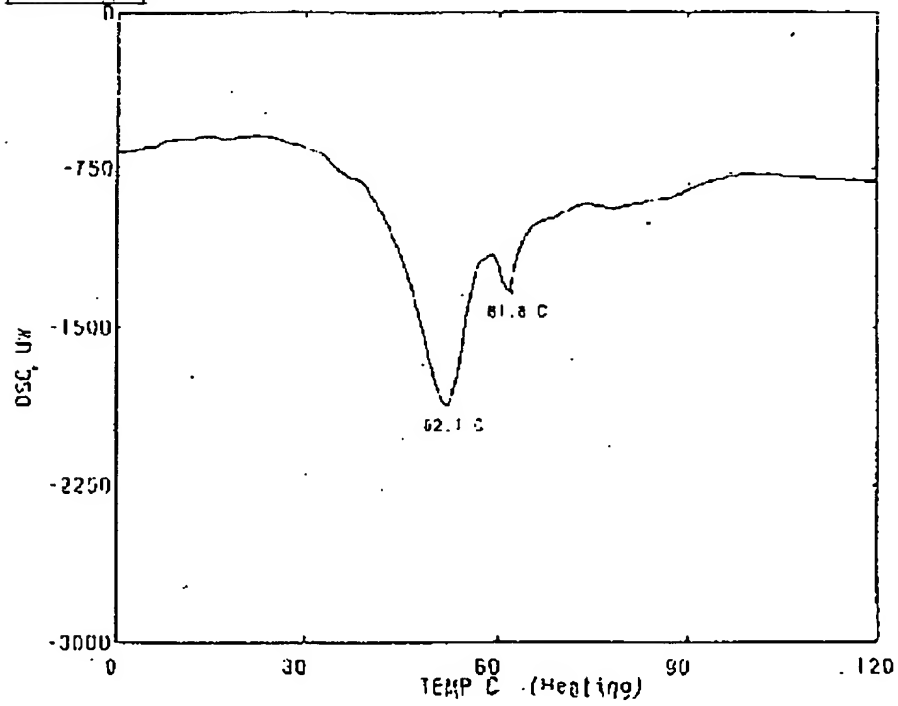
[Drawing 2]



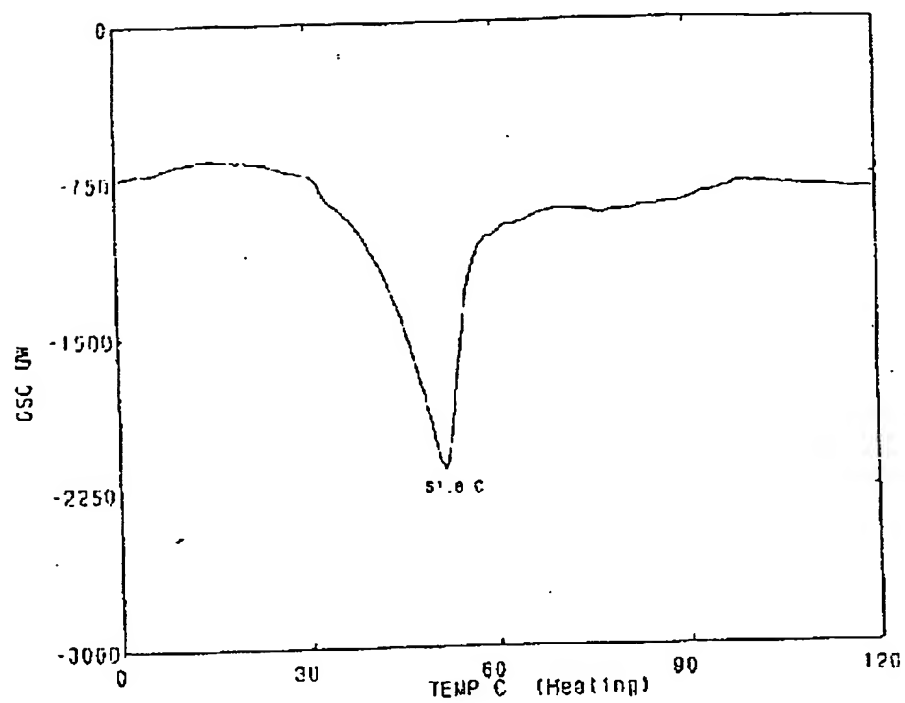
[Drawing 3]



[Drawing 4]



[Drawing 5]



[Drawing 6]

